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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,919	01/30/2004	Tadashi Ohashi	826.1918	3947

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EXAMINER

COUGHLAN, PETER D

ART UNIT PAPER NUMBER

2129

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,919

Applicant(s)

OHASHI, TADASHI

Examiner

Peter Coughlan

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/16/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Detailed Action

Claims 1-15 are pending in this application.

35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15 are rejected under 35 U.S.C. 101 for nonstatutory subject matter.

The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application. Designing classes and subclasses from a super class has no real world function, practical application or benefit. The result has to be a practical application. Please see the interim guidelines for examination of patent applications for patent subject matter eligibility published November 22, 2005 in the official gazette.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful,

tangible and concrete.” If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101.

This application seems to be an exercise only with no practical application. Is the existence of class and subclass within a given domain to be used for automotive repair? Is the existence of class and subclass from a super class to be used for medical diagnoses? If so then no such results have been claimed.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/ non-unpredictable), AND tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

Claims that only generate classes and subclasses from a super class are not statutory. A result that is a practical application is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 9 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims use the terms 'change with time' and 'taken into account'. There is no definition of the amount of change, what is being changed, the length of the window of time in which the change takes place in these claims. The term 'taken into account' is indefinite as well. There exists no 'taken into account' algorithm in regards to the already undefined 'change with time'. This rejection must be addressed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) (hereinafter referred to as **Osawa**) being anticipated by Osawa, 'Generation and Evaluation of Glyphs Representing Superclass-subclass Relationships'

Claims 1, 6, 11

Osawa anticipates storing in a database a super class having a name inclusively describing a class of the knowledge, the class, and the relationship between the classes (**Osawa**, p82, C1:28-35; 'A super class' of applicant is equivalent to 'the prototype system' of 'Java 2 Standard Edition (J2SE)' of Osawa.); and detecting a class relating to a super class stored in the database (**Osawa**, p81, C2:6-10; 'Detecting a class' of applicant is accomplished by the 'unique shape to a visual object' of Osawa.), generating a relationship between the classes by an inference based on multivalued logic (**Osawa**, p81, C2:28 through p82, C1:4; 'Generating a relationship' of applicant is performed by the 'generator' of Osawa. 'Inference' of applicant is equivalent to 'initiator (starting symbol)' of Osawa, 'Multivalued logic' of applicant is equivalent to 'rewriting rule' of Osawa.), and configuring a knowledge structure from information stored in the database and the relationship between the classes obtained by the inference. (**Osawa**, p81, C1:44 through C2:10; 'Knowledge structure' of applicant is equivalent to 'glyphs' of Osawa. 'Relationship between classes' of applicant is equivalent to 'inheritance relationships' of Osawa.)

Claims 2, 7, 12

Osawa anticipates the relationship between the classes includes a weight which weights a relationship between classes obtained by the inference based on the multivalued logic and a hierarchical structure. (**Osawa**, p81, C2:21-27; 'Weights' of applicant is equivalent to 'CIDS' of Osawa.)

Claims 3, 8, 13

Osawa anticipates in the inferring step, a new class is generated when the new class can be generated to associate classes by the inference, and is associated with another class so that knowledge can be structured. (**Osawa**, p81, C2:21 through p82, C1:27; Generating 'to associate classes by the inference' of applicant is accomplished by the 'class hierarchy' of Osawa. 'New class is generated' of applicant is equivalent to 'assign unique glyphs to classes' of Osawa.)

Claims 4, 9, 14

Osawa anticipates in the inferring step, a temporal inference on a knowledge structure described in a class group is conducted and a relationship between classes with a change with time of described knowledge taken into account is included in the knowledge structure. (**Osawa**, abstract; 'Relationship between classes' of applicant is equivalent to 'inheritance relationships' of Osawa.)

Claims 5, 10, 15

Osawa anticipates on a part of a user who uses the knowledge structure generated on a part of a designer, a knowledge structure designed on the part of the designer is restructured by an inference using multivalued logic according to information about a super class describing the knowledge structure and a class group. (Osawa, p82, C1:36 through C2:11 and table 1; 'Describing the knowledge structure and a class group' of applicant is demonstrated by the 'answer questions about determination of a super-subclass relationship' of Osawa.)

Conclusion

The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

- U. S. Patent Publication 20010028359: Muraishi
- U. S. Patent Publication 20020010909: Charisius
- U. S. Patent Publication 20010047402: Saimi
- U. S. Patent 5732263: Havens
- U. S. Patent 5337262: Luthi
- U. S. Patent 6343265: Glebov
- U. S. Patent 6339832: Bowman-Amuah
- 'Object-Oriented Model of a Health Care System': Krol
- On The Interaction of Programming by Contract and Liskov Substitution Principle': Al-Ahmad

-'Object-oriented analysis and design with applications': Aamod

Claims 1-15 are rejected.

Correspondence Information

Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3687. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

Hand delivered to:

Receptionist,
Customer Service Window,
Randolph Building,
401 Dulany Street,
Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);
or faxed to:

(571) 273-8300 (for formal communications intended for entry.)

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Peter Coughlan

9/19/2006



9/26/06
DAVID VINCENT
SUPERVISORY PATENT EXAMINER